

Title (en)

NONAQUEOUS ELECTROLYTE SOLUTION AND NONAQUEOUS ELECTROLYTE BATTERY

Title (de)

NICHT WÄSSRIGE ELEKTROLYTLÖSUNG UND NICHT WÄSSRIGE ELEKTROLYTBATTERIE

Title (fr)

SOLUTION ELECTROLYTIQUE NON AQUEUSE ET BATTERIE ELECTROLYTIQUE NON AQUEUSE ASSOCIEE

Publication

EP 2128923 A1 20091202 (EN)

Application

EP 08722275 A 20080317

Priority

- JP 2008054880 W 20080317
- JP 2007070848 A 20070319
- JP 2007193525 A 20070725
- JP 2007235600 A 20070911

Abstract (en)

A nonaqueous electrolytic solution that can provide a battery that is low in gas generation, has a large capacity, and is excellent in storage characteristics and cycle characteristics contains an electrolyte and a nonaqueous solvent dissolving the electrolyte and further contains 0.001 vol % or more and less than 1 vol% of a compound represented by Formula (1) in the nonaqueous solvent. Alternatively, the nonaqueous electrolytic solution contains 0.001 vol% or more and less than 5 vol% of a compound represented by Formula (1) in the nonaqueous solvent and further contains at least one compound selected from the group consisting of cyclic carbonate compounds having carbon-carbon unsaturated bonds, cyclic carbonate compounds having fluorine atoms, monofluorophosphates, and difluorophosphates. In Formula (1), R 1 to R 3 each independently represent an alkyl group of 1 to 12 carbon atoms, which may be substituted by a halogen atom; and n represents an integer of 0 to 6.

IPC 8 full level

H01M 10/052 (2010.01); **H01M 10/0567** (2010.01); **H01M 10/0568** (2010.01); **H01M 10/36** (2010.01)

CPC (source: EP KR US)

H01M 10/05 (2013.01 - KR); **H01M 10/052** (2013.01 - EP US); **H01M 10/0567** (2013.01 - EP US); **H01M 10/0568** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP US)

Cited by

US2017162906A1; US10615455B2; EP3993127A4; EP2360771A1; EP2461415A1; EP2031689A4; US2015364794A1; US9231276B2; US11296357B2; WO2014012980A1; US12009482B2; CN105830271A; EP3086397A4; JPWO2019189414A1; EP3780225A4

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